The UK's Leading Showcase for Next-Gen, Industry-Ready Research

ACC ADVANCED CONNECTIVITY SHOWCASE

Event Programme

Monday, 1 December 2025,
Science Museum, London

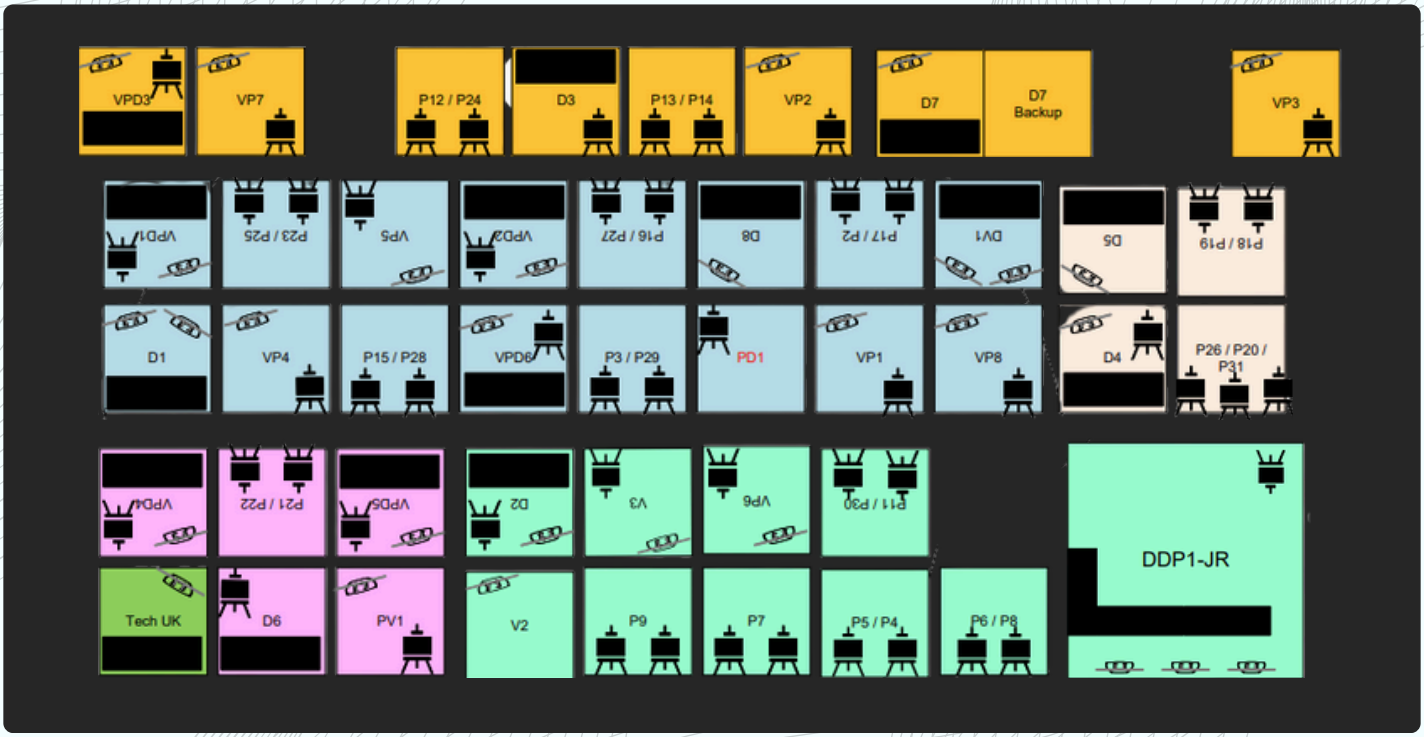
In partnership with

techUK
FOR WHAT COMES NEXT

Explore pioneering work across five domains

- Advanced radio systems, advanced physical layer technologies and spectrum innovation
- AI-native networks and automation
- Emerging technologies and frontier communication
- Next-generation network architectures
- Security, privacy and trust

Exhibition and Live Demonstrations



Advanced radio systems, advanced physical layer technologies & spectrum innovation	AI-native networks & automation	Security, privacy & trust	Next-gen network architectures	Emerging technologies & frontier communication

D1	Rate-splitting multiple access (RSMA) for 6G	D2	Validating xApp development in cyber-physical digital twin
D3	mm-level sensing with mmWave: Privacy-safe indoor healthcare and smart city traffic solutions	D4	NanoSync DC: Time-optimised optical networks for data centers
D5	Novel frequency-hopping OFDM SCMA system	D6	Securing Wi-Fi connectivity: Wi-Fi device authentication using hardware fingerprints
D7	Advanced wireless & optical: Breakthroughs in RIS, OWC, and fibre	D8	Contactless optical communication across rotary joints
DDP1-JR	JOINER: Spectrum, NTN and the AI acceleration facility	PD1	RF-sensing for human pose, position, and vital sign monitoring
VPD1	ML-enabled RIS-aided communication	VPD2	SenseRAN: sensing through the data payload - constellations matter
VPD3	Micro light-emitting diodes for ultrafast optical wireless communications	VPD4	Secure integrated sensing and communications for defence: Secure sensing and communication
VPD5	Plug-and-play and low-cost optical repeater prototypes	VPD 6	6G radio
DV1	Human- and platform-centric compression of teleoperation video for low altitude economy		

Poster and Video Exhibits

P11: Agentic AI-RAN: Digital twins for autonomous open RAN simulate, optimise, and orchestrate compute & spectrum at the edge

P12: Recent advances in high-capacity optical transmission

P13: OptiLink: Enabling cost-effective high-speed interconnects with analogue optical signal processing

P14: Integration of AI-driven end-to-end V2V Communication for cooperative perception in intelligent transportation systems

P15: AI-based optical wireless positioning

P16: Signalling and waveform design for visible light communications

P17: Fighting turbulence for next-generation optical SATCOM

P18: GSM-AFDM: A doppler resilient waveform

P19: E2E network slicing for seamless service: Intelligent E2E slice orchestration for reliable high-quality service delivery

P2: Advanced antenna architectures for seamless communications and sensing

P20: CarbonSmart Networks: Rethinking telecom sustainability

P21: Safeguarding LLM-assisted network management with formal verification

P22: 6G-FINESSE: Is 6G a friend or a foe for physical layer security in quasi-static environments?

P23: Smart radio map

P24: Atmospheric turbulence emulator for free space optical communications

P25: HASC-related work at the Centre for Wireless Innovation, Queen's University Belfast

P26: 5G RAN integrating optical wireless communication (OWC) links as fronthaul and backhaul

P27: Exploring reconfigurable intelligent surface technology for optimal end-to-end connectivity

P28: SINATRA: Successive interference cancellation for dynamic spectrum access

P29: GaN technology for resilience and energy-efficient RF

P3: Reinforcement-learning beam alignment for base-station transmissions without CSI

P30: Synchronous photonic switch node: An enabler for future low-power, low-latency AI and RAN networks

P4: Agentic AI-based rApp development and orchestration

P5: AI-enhanced chip-scale optical monitoring: Smarter network diagnostics with SOAs

P6: End user intent translation to goal-oriented and AI-native communication and computation orchestration (INTENT)

P7: Next-VeRAN: AI-driven sustainable & reliable vehicular networks, solving carbon-aware computing and continuous reliable connectivity in next-gen vehicular RAN

P8: Analogue over-the-air federated learning with interference-based energy harvesting

P9: Sustainable AI: Towards physical neural networks

PV1: SecureSense+: Enhanced secure 6G real-time joint communication and sensing testbed

V3: mATRIC digital twin enabled omniverse: Addressing intelligent wireless access and robot twin simulation for 6G applications

VP1: WiSeCom: Wi-Fi-based simultaneous sensing & communication

VP2: Low-cost real-time underwater optical wireless communication modem for under sensor networks

VP3: Optical ISAC

VP4: Power-over-fibre at 5 km to switch optical 800G ethernet signal in all-optical networks

VP5: ORLANDO: O-RAN intelligent adaptive Load bAlaNcing and efficiency in highly Dense deplOyments

VP6: Context-aware human-centric comms: Addressing multi-modal computation & communication efficiency for future networks

VP7: Reconfigurable intelligent surface-enabled X-band non-line-of-sight sensing

P31: TERIS: Tool for Emulated Routing at Internet Scale

V2: PRB allocation xApp on ORAN with live Video streaming

VP8: Resilience for fiber-wireless-fiber links using handovers

Event Agenda

09:30-10:00	Registration	
10:00-10:10	Opening	Michaela Eschbach, CEO, Cambridge Wireless
10:10-10:25	FTH Vision	Federated Telecoms Hubs Directors
10:25-10:40	EPSRC Remarks	Maisie England, Head of Future Communications Research, EPSRC
10:40-11:10	Keynote	Simon Clement, Director, Liberty Global
11:10-11:20	Partner Keynote	Tales Gaspar, Programme Manager, techUK
11:20-11:45	Break	
11:45-12:45	Elevator pitches	FTH Researchers
12:45-16:00	Exhibition & Lunch	
16:00-16:30	Closing Session	FTH Directors & Audience

Thank you for attending our event

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